

Incremental Capacity Auction (ICA) – Stakeholder Feedback Form

Stakeholder Options Phase Meeting #1: August 16th, 2017

Feedback request by: 2017/09/13 Date Submitted: 2017/09/26	Feedback provided by: Company Name: Power Advisory LLC on behalf of CanWEA and a Consortium of Renewable Generators Contact Name: Alison Cumming, Manager of Markets Phone: [REDACTED] Email: [REDACTED]
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By submitting this Stakeholder Feedback Form, the company or individual identified above, as applicable, consents to the disclosure by the IESO of this Stakeholder Feedback Form and its contents, in whole or in part, in stakeholder engagement meetings, on the IESO website or otherwise.

The IESO held the first meeting of the ‘Options Phase’ of the Incremental Capacity Auction engagement on August 16th, 2017. The meeting covered the design elements related to establishing the demand curve (i.e. Target Capacity, Net CONE, Min/Max Capacity Limits, Maximum Auction Clearing Price, and Slope of Demand Curve).

The presentation can be [found here](#).

In order to maximize the effectiveness of this stakeholder engagement process, the IESO requests that stakeholders use the template below to provide feedback on content presented as follows:

- Provide responses to the questions posed
- For options presented, indicate your preference along with applicable rationale/supporting arguments
- Identify any aspects that you believe require further elaboration or discussion

Feedback received may be shared by the IESO on its website, at future stakeholder engagement meetings, or otherwise and will help inform further discussions at future stakeholder engagement meetings.

Please send this form with your feedback to engagement@ieso.ca

General Comments/Feedback:

Power Advisory LLC has coordinated this submission on behalf of a Consortium of renewable generators and the Canadian Wind Energy Association (CanWEA). The members of the Consortium include: BluEarth Renewables; Boralex; Brookfield Renewable Power; EDF EN; EDPR; Enbridge; ENGIE; H2O Power; Kruger Energy; NextEra Energy; Pattern Energy; and, Suncor.

Where applicable, we have provided feedback regarding the Incremental Capacity Auction (ICA) in the form below. However, given that an ICA will not stimulate investment in renewable energy and that wind generation participation is limited within centralized Capacity Markets, it is difficult to opine on the various design elements. Complementary and different tools are required to stimulate investment in renewables. For this reason, in July 2017 the Consortium requested formation of a Market Renewal Working Group (MRWG) Sub-Committee which could explore potential future mechanisms (both policy and market mechanisms) to effectively develop and integrate non-emitting resources within the re-design of Ontario's wholesale electricity market as appropriate. It is our understanding that the work of the Sub-Committee will commence in the coming weeks and will serve as a valuable source of input to the high-level designs for the ICA (and other Market Renewal Process (MRP) workstreams including the Single Schedule Market (SSM)). The input from the Sub-Committee will be of value because, while the IESO-administered centralized Capacity Market (i.e., ICA) can work within Ontario's electricity market by helping to secure some resources towards partially meeting Ontario's power system resource adequacy needs – it can only do so with limited application, therefore the ICA may not be solely sufficient in meeting Ontario's future supply needs and other, complimentary mechanisms should be simultaneously considered.

The IESO has stated that Market Renewal will lead to a system with transparent revenue streams for needed services, with all streams together providing incentives for existing and new resources, and that all resources should have the opportunity to compete. The MRP must seek to include consideration of how to maximize existing renewable assets as well as how to incent new renewable investment when new supply is needed. Further thoughts on this are captured in the feedback form below.

We look forward to continued participation within the IESO's MRP stakeholder engagement and collaboration with the IESO.

ICA Goals & Objective	Stakeholder Feedback
<p>Draft Goal: <i>Slides 6-14</i></p> <p>Do stakeholders agree with the following proposed Goal statement for the ICA Project?</p> <p><i>The Incremental Capacity Auction Project will develop and implement an enduring market-based capacity procurement mechanism that will, alongside contracted and rate regulated resources, ensure Ontario’s resource adequacy needs are met cost effectively within the broader policy framework.</i></p>	<ul style="list-style-type: none"> • An IESO-administered centralized Capacity Market (i.e., ICA) can work within Ontario’s electricity market by helping to secure <u>some</u> resources towards partially meeting Ontario’s power system resource adequacy needs but with limited application, therefore the ICA may not be solely sufficient in meeting Ontario’s future supply needs. • Recommendation: Regarding the draft goal statement, it is recommended that the statement be amended to: <i>“The Incremental Capacity Auction Project will develop and implement an enduring market-based capacity procurement mechanism that will, alongside contracted and rate regulated resources <u>and other procurement mechanisms</u>, ensure Ontario’s resource adequacy needs are met cost effectively within the broader policy framework”</i> for the following reasons: <ul style="list-style-type: none"> • On balance, given relatively limited participation anticipated for some resources within the ICA and depending on the ICA design, the resources projected to be secured through each auction are uprates to existing gas-fired generation (e.g., Non-Utility Generators (NUGs) with expired Power Purchase Agreements (PPAs), gas-fired generation with expired IESO contracts), Demand Response (DR), and imports. • In securing relatively low cost capacity all with the same performance requirements to produce energy when the power system most requires energy, relatively cheap fossil-based resources (e.g., gas-fired generation uprates in Ontario, U.S. imports from coal- and gas-fired generation) project to be secured at the expense of renewable generation, some conservation and demand management (CDM) resources, and emerging technologies (e.g., energy storage, etc.). • If the ICA is designed similar to the centralized Capacity Markets in ISO-NE, NYISO, and PJM, then mechanisms like contracts will still be needed if Ontario is to procure resources such as renewable generation, some CDM, and emerging technologies (e.g., energy storage, etc.) – as these resources best meet applicable Ontario Government policies and objectives (e.g., climate change, etc.). • The draft goal statement does not specifically identify the “broader policy framework”. • Recommendation: It is therefore recommended that the IESO amend the goal statement to identify which broader policy frameworks are included. For example, is the goal to ensure Ontario’s resource adequacy needs are met cost effectively while also achieving the Ontario Government policy objectives as set out in the Long-Term Energy Plan and associated government directives?

<p>Draft Objectives: <i>Slides 6-14</i></p> <p>Do stakeholders agree with the following proposed Objectives for the ICA Project?</p> <ol style="list-style-type: none">1. Meet incremental resource adequacy needs2. Secure incremental capacity at the lowest cost in the long run	<ul style="list-style-type: none">• Regarding Objective 1, is the ICA intended to be the sole mechanism to procure incremental capacity? As identified previously in this feedback form, standard capacity market design does not lend itself well to participation from some resource types (wind and solar, for example). Therefore depending on the design of the ICA, some resources will have limited or no ability to participate. Considering this fact along with potential future government supply mix or environmental objectives, other procurement mechanisms (including power purchase agreements and regulated rates) may be required to procure capacity.• Recommendation: Modify Objective 1 to reflect the fact that the ICA will meet <u>a portion</u> of incremental resource adequacy needs.
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<p>Draft Strategic Outcomes: <i>Slides 6-14</i></p> <p>Do stakeholders agree that the objectives can be achieved if, within the broader policy framework?</p> <ul style="list-style-type: none">• A transparent market price is established for the value of capacity in each zone• Incremental capacity is secured in the locations and timeframes that align with resource adequacy needs• Diverse resource types are enabled to compete to meet resource adequacy needs• Auction design evolves over time to address sector changes and improve auction outcomes• Risk is appropriately allocated	<p>Regarding the objective “Diverse resource types are enabled to compete to meet resource adequacy needs”, the Consortium offers the following comments:</p> <ul style="list-style-type: none">• The successful participation of various resource types will be highly dependent on the actual design of the ICA and whether or not the design considers and links to Ontario’s environmental objectives.• Traditionally, centralized Capacity Markets provide relatively less capacity revenues to renewable generation (especially so for wind generation) compared to nuclear, coal-, and gas-fired generation. Therefore the procurement of renewable resources needs to be carefully considered in the context of any ICA.<ul style="list-style-type: none">○ For example, if the IESO intends for the ICA design to successfully attract diverse resource types including renewable generators, some specific design mechanism will be needed to best marry Ontario’s power system needs with applicable Ontario Government policies with cost effective results.○ Under this scenario, the IESO and stakeholders should explore how carbon pricing or similar could be directly addressed through the ICA design, which would better ensure participation of renewable generation, CDM, and emerging technologies (e.g., energy storage, etc.) within auctions.○ This is exactly the time of input that the aforementioned Sub-Committee should be called upon to provide, and given the pace of the ICA engagement and the MRP overall, such discussions should be initiated immediately. <p>Regarding the objective “Auction design evolves over time to address sector changes and improve auction outcomes”, the Consortium offers the following comments:</p> <ul style="list-style-type: none">• As with all areas of market design, there is an expectation that ICA-related Market Rules will change and design elements will evolve over time.• Any increased risk shift to investors in the market (i.e. move towards less reliance on procurement contracts) through greater participation within Ontario’s wholesale electricity market (e.g., ICA, etc.) will require a new governance framework to be developed.<ul style="list-style-type: none">○ e.g., contract terms and conditions can effectively address present lack of independent oversight and governance within Ontario’s electricity market, through sufficient protections (in the event of unforeseen changes).• As a general consideration, as the market evolves an effective governance framework will be needed in order to provide clarity, confidence, and transparency regarding changes to IESO Market Rules and wholesale electricity market design, where market participants and stakeholders have the ability to actively participate within applicable wholesale market change processes so as to be able to express their view points and protect their business decisions and investments.
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Design Element	Features	Questions for Stakeholders	Stakeholder Feedback
Target Capacity	Hold-Back <i>Slides27-32</i>	Please identify preferred option and provide supporting rationale. OPTIONS: <ol style="list-style-type: none"> 1. With “Hold-back” 2. Without “Hold-back” QUESTION: What other considerations could inform this decision?	[Intentionally left blank]
	Transparency and certainty <i>Slides33-36</i>	QUESTION: What information would stakeholders/participants require in order to understand how the reserve requirement, and subsequently the Target Capacity, is determined by the IESO? <ul style="list-style-type: none"> • To ensure IESO communicate relevant information, it would help to understand the intended use of the requested information 	<ul style="list-style-type: none"> • <u>Demand Side Information:</u> Stakeholders need to understand the methodology IESO uses to forecast demand, and inputs IESO uses to forecast demand, and the contribution of distributed generation and CDM on the forecast demand. • Stakeholders also need to understand how IESO establishes the Reserve Margin with linkages back to NPCC and NERC. • Recommendation: IESO should establish an ongoing Demand Forecasting Working Group. • <u>Supply Side Information:</u> Stakeholders need to understand the capacity contribution from rate regulated assets (even though they are not participating in the ICA, they are part of resource adequacy) by unit, and the capacity contribution for transmission-connected contracted assets. Stakeholders also need to understand relative capacity contribution and import capability of the interties. • Recommendation: IESO should establish an ongoing Supply Adequacy Working Group.

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	Timelines <i>Slides37-39</i>	<p>QUESTION: What activities do participants envision typically occurring after the Target Capacity has been published (e.g., arranging financing, vendors, project development work, site selection, permitting, etc.)?</p> <ul style="list-style-type: none"> • How long, on average, would these activities take? <p>QUESTION: How far beyond the commitment period would stakeholders desire that “Target Capacity” <u>projections</u> be published?</p>	[Intentionally left blank]
Net CONE	Reference Technology <i>Slides46-49</i>	QUESTION: What considerations should drive the selection of the reference technology in Ontario?	<ul style="list-style-type: none"> • Recommendation: Similar to the aforementioned Demand Forecasting Working Group and Supply Adequacy Working Group, the IESO should establish standing committees to oversee issues related to reference technology selection, setting the demand curve, etc. The IESO should establish processes to determine how stakeholder support and consensus will be reached.
	Gross CONE <i>Slides50-52</i>	QUESTION: Are there Ontario-specific considerations that should be reflected when establishing the methodology for estimating Gross CONE?	<ul style="list-style-type: none"> • Recommendation: The cost of regulatory approvals in Ontario should be specifically identified as a key input. • The province, through procurement and other policy mechanisms has also created an expectation in many instances of Indigenous/Community equity participation at a project level. • Recommendation: These costs need to be factored in as well.

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	Energy & Ancillary Services Offset <i>Slides53-55</i>	QUESTION: What considerations do stakeholders feel is important to consider when defining the methodology for forecasting the E&AS Offset?	[Intentionally left blank]
	Stakeholder Involvement <i>Slides56-59</i>	QUESTION: What expectations do participants have for their level of involvement in setting the inputs that will feed into the Net CONE study? QUESTION: To what extent should the outputs from the Net CONE study be open to debate or revisiting?	<ul style="list-style-type: none"> • Recommendation: An ongoing working group should be established in order to set the inputs which will feed into the Net CONE study. This could be part of the aforementioned Supply Adequacy Working Group. • The aforementioned new governance framework is highly applicable to this aspect of the ICA as well.
	Frequency of Revision <i>Slides60-64</i>	Please identify preferred option and provide supporting rationale. OPTIONS: <ol style="list-style-type: none"> 1. Reset performed > 4 year cycle 2. Reset performed every 3-4 years 3. Reset performed < 3 year cycle QUESTION: What other considerations could inform the decision of how frequently the Net CONE components need to be updated?	<ul style="list-style-type: none"> • Regarding what considerations could inform how frequently the Net CONE components need to be updated, consistency is imperative. • Recommendation: Methodologies, frequency and information need to be consistent between the 18 Month Outlook, Ontario Planning Outlook, Long-Term Energy Plan, and Capacity Auctions. The frequency also needs to be aligned with the needs of the system and the development timelines.
	Zonal Net CONE <i>Slides65-69</i>	Please identify preferred option and provide supporting rationale. OPTIONS: <ol style="list-style-type: none"> 1. Single Net CONE for Ontario 2. Use zonal Net CONE estimates QUESTION: What other considerations could inform the decision of whether to estimate zonal Net CONE values?	<ul style="list-style-type: none"> • Regarding the decision of whether to estimate zonal Net CONE values, some zones may not be conducive to certain types of resources being built. • If government policy is sensitive to procuring a specific supply mix and obtaining certain resources, that would alter what resources would be procured in certain zones, which will influence transmission decisions.

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Min/Max Capacity Limit	Methodology for determining limits <i>Slides78-82</i>	Please identify preferred option and provide supporting rationale. OPTIONS: 1. Set as a percentage of Target requirement 2. Based on specified LOLE 3. Based on low/high demand outlooks QUESTION: Are there any other considerations that should be taken into account when establishing the mechanism for setting minimum/maximum limits for the base auction?	[Intentionally left blank]
Maximum Auction Clearing Price (MACP)	Methodology for calculating MACP <i>Slides90-94</i>	Please identify preferred option and provide supporting rationale. OPTIONS: 1. Function of Net CONE 2. Function of Gross CONE QUESTION: What other considerations could inform the decision of how to establish the MACP? – Gross CONE vs. Net CONE – Magnitude of multiplier	[Intentionally left blank]
	Price Floor for MACP <i>Slides95-99</i>	Please identify preferred option and provide supporting rationale. OPTIONS: 1. With Price Floor 2. Without Price Floor QUESTION: What other considerations could inform the decision of whether a price floor for MACP is required?	[Intentionally left blank]

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Slope of Demand Curve	Shape of demand curve <i>Slides107-114</i>	Please identify preferred option and provide supporting rationale. OPTIONS: <ol style="list-style-type: none"> 1. Steeper Slope 2. Flatter Slope 3. Convex 4. Concave QUESTION: What aspects of each demand curve shape do stakeholder believe Ontario should adopt? Why?	[Intentionally left blank]